

## **REMARKS**

### **Introductory Comments**

Prior to this Amendment, claims 12-14, 16-18 and 45-58 were pending in this application. By this Amendment, Applicant has amended claims 12, 17, 18 and 45; cancelled claims 13, 14, 16 and 46-58 without prejudice or disclaimer of the subject matter recited therein; and added claims 59-67. With this amendment, claims 12, 17, 18, 45 and 59-67 are pending. Continued examination of the application, as amended, is respectfully requested.

### **Claim Interpretation**

The Examiner alleged the use of intended use terms in several of the pending claims, and that “It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations.” Applicant refers the Examiner to MPEP § 2173.05(f) which states: “A functional limitation must be evaluated and considered, just like any other limitation of the claim, for what it fairly conveys to a person of ordinary skill in the pertinent art in the context in which it is used.” Applicant respectfully requests that any functional limitation in the attached claims “be evaluated and considered, just like any other limitation of the claim, for what it fairly conveys to a person of ordinary skill in the pertinent art in the context in which it is used.”

### **Claim Rejections – 35 USC § 103**

The Examiner rejected claims 12-14, 16-18 and 45-58 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,900,935 to Klein et al. (“Klein”) in view of U.S. Patent No.

6,312,901 to Virtanen (“Virtanen”).

Legal Standards

A claimed invention is unpatentable if the differences between it and the prior art “are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art.” 35 U.S.C. § 103(a) (see Graham v. John Deere Co., 383 U.S. 1, 14, 148 USPQ 459, 465 (1966)). “The ultimate determination of whether an invention is or is not obvious is a legal conclusion based on underlying factual inquiries including: (1) the scope and content of the prior art; (2) the level of ordinary skill in the prior art; (3) the differences between the claimed invention and the prior art; and (4) objective evidence of nonobviousness.” In re Dembiczak, 50 USPQ2d 1614, 1616 (Fed. Cir. 1999).

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine its teachings with one or more additional sources. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined), must teach or suggest all the claim limitations. M.P.E.P. § 2143. Moreover, to establish a *prima facie* case of obviousness, the Examiner must also demonstrate that there is an apparent reason to combine the known elements in the fashion claimed by the patent at issue (see KSR International Co. v. Teleflex Inc., 127 S.Ct. 1727, 82 USPQ2d 1385 (2007)). Even if each feature of a claim can be independently shown within the cited art references, this alone is insufficient to conclude that a claim is obvious in view of such art. *Id.* Instead, to render a claim obvious over a combination of cited references, an Examiner must provide “some articulated reasoning with some rationale underpinning to support the legal conclusion of obviousness.” *Id.* Moreover, the

Examiner must make “explicit” this rationale of “the apparent reason to combine the known elements in the fashion claimed,” including a detailed explanation of “the effects of demands known to the design community or present in the marketplace” and “the background knowledge possessed by a person having ordinary skill in the art.” *Id.* at 14. Finally, the Examiner cannot pick and choose among the individual elements of assorted prior art references to recreate the claimed invention to support an obvious rejection; rather, the Examiner has the burden to show some apparent reason or justification to combine the known elements in the fashion claimed by the patent at issue. (See *Id.* and Smith-Kline Diagnostics, Inc. v. Helena Laboratories Corp., 8 U.S.P.Q.2d 1468, 1475 (Fed. Cir. 1988)).

#### Analysis

Amended claim 12 recites “a reference path detector on the reference path responsive to the second output beam to generate a reference path signal; and a processing system that determines the presence or absence of the first analyte based upon the reference path signal.” However, neither Klein nor Virtanen, either alone or in combination, disclose “a reference path detector on the reference path,” nor do they disclose “a processing system that determines the presence or absence of the first analyte based upon the reference path signal” generated by the reference path detector as recited in claim 12. For at least these reasons Applicant submits that claim 12 is patentable over Klein and Virtanen. Claims 17, 18 and 45 depend on base claim 12 and recite additional limitations. According, Applicant respectfully requests that claims 12, 17, 18 and 45 be found allowable.

If the Examiner should disagree with the Applicants’ remarks, the Examiner is asked to kindly point out with particularity where these claimed limitations are expressly disclosed within the teachings of Klein and/or Virtanen.

### **New Claims**

New claims 59 and 60 depend on base claim 12, which is believed to be allowable. According, Applicant respectfully requests that claims 59 and 60 be found allowable.

New claims 61-67 include independent claim 61 and claims 62-67 which depend thereon. Independent claim 61 recites several distinguishing limitations, for example both “a signal path detector on the signal path responsive to the first output beam to generate a signal path signal” and “a reference path detector on the reference path responsive to the second output beam to generate a reference path signal”; as well as “a processing system that receives the signal path signal and the reference path signal and determines the presence or absence of the analyte based upon the signal path signal and the reference path signal.” An exemplary embodiment of this configuration is disclosed in Figure 21 and associated paragraphs of the specification, as well as other places in the application. It is believed that claim 61 distinguishes over the prior art, and claims 62-67, which depend on base claim 61, recite additional potentially distinguishing limitations. According, Applicant respectfully requests that claims 61-67 be found allowable

If the Examiner should disagree, the Examiner is asked to kindly point out with particularity where these claimed limitations are expressly disclosed within the prior art.

### **Final Comments**

The application is believed to be in condition for allowance. Such allowance is respectfully requested.

In the event that there are any questions related to these amendments or to the application in general, the undersigned would appreciate the opportunity to address those questions directly

in a telephone interview at 919-861-5092 to expedite the prosecution of this application for all concerned. If necessary, please consider this a Petition for Extension of Time to affect a timely response. Please charge any additional fees or credits to the account of Bose McKinney & Evans, LLP Deposit Account No. 02-3223.

Respectfully submitted,

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